

UDOT RESEARCH DIVISION and USU FREEWAYS TO FUEL INITIATIVE



SAFFLOWER



CANOLA



CAMELINA



PERENNIAL FLAX

General Crop Characteristics

- Grown on marginal agricultural lands
- The seed can either be broadcast or drilled
- Seeding is usually done in combination with fertilizer
- Produce >35% oil content in seed
- Low water requirements
- Germination occurs rapidly after soil temperatures reach 38-40F.

Questions to be Answered

- Crop Production
 - Will it Grow in UDOT soils
 - Recropping – planting year after year
- Safety in Producing Crop
 - Roadside equipment operation
- Processing
 - Pressing and conversion
- Erosion
 - Will oil seed crops provide equal erosion benefits

Source: Bluecow Inc.

FREEWAYS TO FUEL INITIATIVE

Research Design

Randomized Complete Block Design

Treatment	Treatment number
Control	1*
Spring Canola	2*
Roundup Ready® spring canola	3*
Fall Canola	4*
Roundup Ready® Fall Canola	5*
Safflower	6*

*Each Plot will be measured for erosion utilizing rill meter technology

- Plots measure 8'X20' with a 25' space in between each plot for equipment turnout
- Each treatment will be replicated 4X at each location
 - This equals 24 plots per location plus 24 - 25' spaces in between each plot = 1080' long area by 8' wide of plot area at each location
 - Equals about 0.2 acres per location
- Fall treatments will be planting beginning sept – oct of this year
- Demonstration Plots of Perennial Flax (APAR) will be placed at each end of the trials
 - These plots will also be 8'X20'

PLOT SIZE AND TREATMENT



SEEDING OPERATION

Source: Bluecow, Inc.

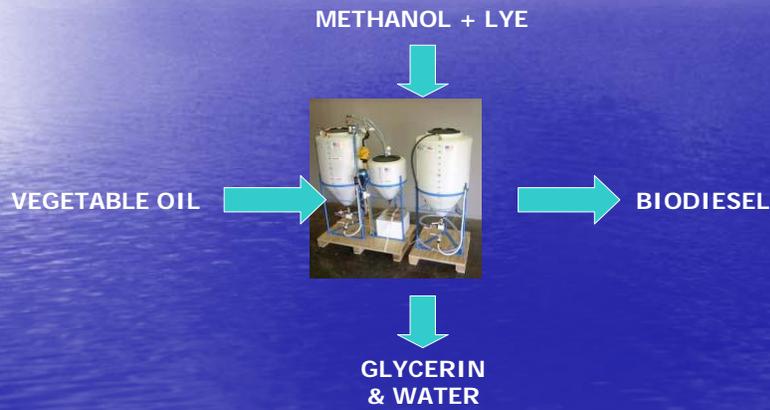


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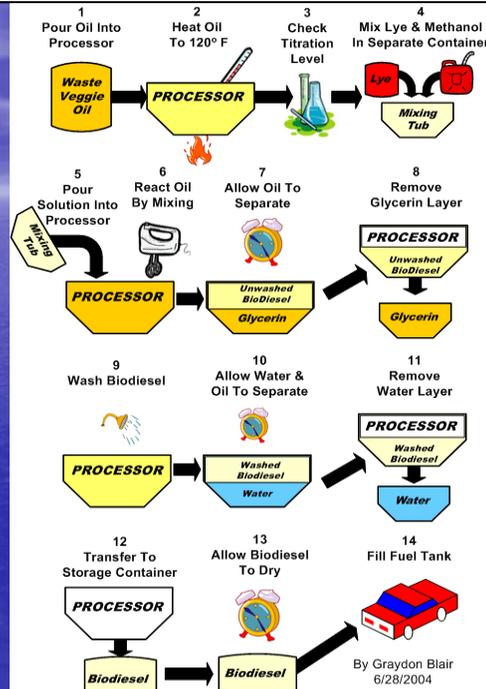
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BASIC PROCESS STREAMS



PROCESSOR

How is Biodiesel Made?



Source: Bluecow, Inc.



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